

Application Serial No. 09/818,383
Amendment dated May 4, 2005
Reply to Office Action dated February 4, 2005

Remarks

The preceding amendments and following remarks are submitted in response to the Official Action of the Examiner mailed February 4, 2005. Claim 26 has been amended and new claims 32-36 have been added. Claims 26-36 are pending in this Divisional Application. Support for the amendments is found in the specification, claims, and drawings as originally filed. No new matter has been added. Reconsideration, examination and allowance of all pending claims are respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claims 26 and 28 are rejected as being obvious over Daroga (US 4,631,872) in view of Trice (US 3,251,159). The Examiner asserts that Daroga teaches a shelter including oxygen cylinders, carbon dioxide absorbers, and sealing devices (valve, air-tight door, escape hatch). Applicant respectfully traverses the rejection. Independent claim 26 recites:

A kit for providing a breathable room atmosphere comprising:
at least one portable sealing device for sealing said room from any coupled ventilation ducts;
a portable carbon dioxide scrubber; and
a portable gaseous oxygen source.

(emphasis added). Daroga does not appear to teach a portable sealing device, portable carbon dioxide scrubber, and portable gaseous oxygen source, as is recited in the independent claim. Daroga teaches a fall-out shelter formed by double steel sheet walls with an air intake 51 having a valve 52, oxygen cylinders 24, and chemicals in trays 44 to remove carbon dioxide, odors and carbon monoxide from the air; the shelter is blow ground covered by a layer of earth or concrete. See column 1, lines 65-68 and column 2, lines 2-4, 8, 25-27, and 39-40. Daroga thus appears to teach a permanent shelter structure. Applicant submits that one of ordinary skill in the art would not interpret the fall-out shelter of Daroga as a kit including a portable sealing device, portable carbon dioxide scrubber and portable gaseous oxygen source. The common definitions of the word "portable" include "carried or moved with ease" and "easily or conveniently transported" (see attached online dictionary printout). Applicant submits that one of

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ordinary skill in the art would not consider the door, escape hatch, and valve in Daroga's fall-out shelter as being portable.

The Examiner acknowledges that Daroga does not teach a "kit" but asserts that in view of Trice's disclosure of the need to manufacture a fall-out shelter in segments that are simple to handle and assemble, the shelter of Daroga would be considered a "kit" and all of the parts would be "portable" to the site of installation. One of ordinary skill in the art would read the Daroga patent as teaching building a permanent structure, especially in view of the specific teaching that the "shelter will be below ground covered by a layer 17 of earth or concrete", see column 2, lines 2-4. Applicant submits that the common meaning given to the work "portable" is that the item is movable repeatedly. Even if one considered the components of the Daroga building as being moved to the desired site before assembling the partially underground shelter, one would not consider such components "portable" according to the common usage of the term.

Additionally, there is no motivation to combine the teachings of Daroga and Trice. While Trice teaches a precast bomb shelter that may be quickly set up, Daroga clearly teaches a permanent, partially underground structure. The complexity of the multi-room building of Daroga, with its air handling system is significantly different from the single room blast shelter of Trice, which does not appear to have any of the air handling features of the Daroga building. Applicant submits that even if one were to consider the precast bomb shelter of Trice to be a "kit", there is no motivation for one of ordinary skill in the art to modify the complex building of Daroga into a portable kit. At best, one may view Trice as teaching the possibility of using precast walls to build the structure of Daroga. However, as Trice does not appear to teach a portable sealing device, portable carbon dioxide scrubber, and portable gaseous oxygen source, there is no motivation for one to supply such elements to the building of Daroga. Withdrawal of the rejection is respectfully requested.

Claim 27 is rejected as being obvious over Daroga and Trice and further in view of Connor (US 2,982,511). Applicant respectfully traverses the rejection. Neither Daroga, Trice, or a combination of the references teaches the basic elements of

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independent claim 26 for the reasons set forth above. None of Connor, Mayland, Hoshiko, or Staub, Jr. et al, provide what Daroga and Trice lack.

With respect to claim 27 and the Connor patent, the Examiner asserts that it would have been obvious to substitute the inflatable valve taught by Connor for the valve 52 in the Daroga building in order to simplify the assembly of the overall kit. As discussed above, Daroga appears to teach a permanent partially underground building. Daroga teaches the valve 52 is normally closed, but it can be opened if required and air drawn in by means of a hand pump through a filter. See column 2, lines 39-42. Daroga teaches the building having an oxygen supply and air purifying means, and teaches the building is intended to provide an air, gas, and water tight enclosure to protect against nuclear, biological and chemical hazards. See column 1, lines 5-12. The overall teaching of Daroga is that of an air-tight building in which outside air can, if desired, be drawn in. Connor teaches a pressure-controlled valve that "will remain open in the event of a failure of the control pressure, so that circulation of the controlled fluid will not be interrupted when a failure of the control pressure occurs. See column 1, lines 59-62. Applicant submits that there is no motivation for one of ordinary skill in the art to put the pressure-controlled valve of Connor in the fallout shelter of Daroga because Connor's valve would not appear to function in the normally closed fashion desired by Daroga.

Additionally, the pressure-controlled valve of Connor does not appear to be portable. Connor teaches the valve as being installed in a line of pipe by merely cutting out a section of the pipe and replacing the cut section with the valve. See column 1, lines 35-37. While Connor teaches the valve as easy to install, the valve appears to be a permanent replacement for the section of cut pipe. Applicant submits that even if one were to combine the teachings of Daroga, Trice and Connor, one would achieve the building of Daroga with precast walls as taught by Trice, with a permanently installed valve of Connor. Such a combination does not result in the kit as claimed. Withdrawal of the rejection is respectfully requested.

Claim 29 is rejected as being obvious over Daroga in view of Trice and further in view of Mayland (US 3,485,743). Applicant respectfully traverses the rejection. Neither Daroga, Trice, or a combination of the references teaches the basic elements of

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independent claim 26 for the reasons set forth above. Applicant submits that Mayland does not provide what Daroga and Trice lack. Claim 29 recites an oxygen generator having an exhaust tube adapted to be inserted through an existing plumbing water trap. The Examiner asserts that Mayland teaches venting hydrogen gas from compartment 10 via tubing, which is capable of being connected to any desired location such as an existing plumbing water trap of sink or toilet. Applicant has carefully reviewed the Mayland patent and have found no such teaching. Mayland do teach an embodiment in which some of the hydrogen created by the air purification method is circulated back to the second compartment of the apparatus (column 3, lines 5-9). Mayland also teach separately venting the hydrogen and mixture of carbon dioxide and oxygen to the outside of the submarine (column 5, lines 55-57). Mayland do not appear to teach venting hydrogen gas through tubing capable of being connected to an existing plumbing water trap or toilet. Mayland thus does not appear to teach what Daroga and Trice lack. Withdrawal of the rejection is respectfully requested.

Claim 30 is rejected as being obvious over Daroga in view of Trice and further in view of Hoshiko (US 4,508,700). Claim 31 is rejected as being obvious over Daroga in view of Trice and further in view of Staub, Jr. et al. (US 3,593,711). Applicant respectfully traverses the rejections. Neither Daroga, Trice, or a combination of the references teaches the basic elements of independent claim 26 for the reasons set forth above. Neither Hoshiko nor Staub, Jr. et al. appears to provide what Daroga and Trice lack. Thus, any combination of Daroga, Trice and Hoshiko or Staub, Jr. et al. also fails to teach or suggest the elements of the claims. Withdrawal of the rejection is respectfully requested.

Claims 26 and 28-31 are rejected as being obvious over Rudinger (US 2,977,723) in view of Trice and further in view of Daroga, Mayland, Hoshiko or Staub. The Examiner asserts that even though Rudinger teaches a bomb shelter made of poured concrete, it would have been obvious to make Rudinger's shelter of parts assembled on site in view of the teachings of Trice, and that in doing so, the Rudinger shelter would be considered a "kit" and all of the parts would be "portable" to the site of installation. Applicant respectfully traverses the rejection.

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Rudinger teaches a permanent bomb shelter that can be provided with an air purifier that removes carbon dioxide from the air. See column 2, line 70 through column 3, line 4. Rudinger does not appear to teach or suggest a portable sealing device for sealing the shelter from any coupled ventilation ducts, a portable carbon dioxide scrubber, or a portable gaseous oxygen source, as is recited in independent claim 26. Applicant submits that one of ordinary skill in the art would not interpret the bomb shelter of Rudinger as containing portable components. It appears the Examiner is construing the term "portable" as meaning anything that is capable of being moved once to a location where it is permanently installed and not movable thereafter. Applicant submits that such interpretation is contrary of the common usage of "portable."

MPEP 2111 states that the verbiage of claims is to be given "the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art" and also states that the "broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach", citing *In re Cortright*, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). Applicant submits that the term "portable" would be understood by one of ordinary skill in the art as meaning movable repeatedly, and not moved once and then permanently installed, as is asserted by the Examiner. None of the cited references teach portable components as recited in the claims. Withdrawal of the rejections is respectfully requested.

Claim 27 is rejected as being obvious over Rudinger, Trice, Daroga, Mayland, Hoshiko and Staub and further in view of Pearman (US 6,217,441). The Examiner asserts that it would have been obvious to substitute the inflatable sealing device of Pearman for the steel door of Rudinger because both are well known sealing devices within the bomb shelter arts and would work equally well. Applicant respectfully traverses the rejection. Rudinger teaches a bomb shelter designed and intended to protect occupants from the radioactivity and intense heat attendant the explosion of an atom bomb or hydrogen bomb. See column 1, lines 18-20. Rudinger teach the shelter as being made of poured concrete or metal, and specifically teaches a steel door for closing the air filter 32 (column 3, lines 9-10). Pearman teaches a method of sealing building ductwork

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in response to a chemical or biological attack to prevent the HVAC system from delivering the chemical or biological agent throughout the building (abstract).

Applicant submits that one of ordinary skill in the art would not be motivated to substitute the inflatable bladder of Pearman for the steel door of Rudinger because they do not provide the same level of protection. One of ordinary skill in the art would have no reason to believe that an inflatable bladder designed to prevent chemical or biological agents from entering an HVAC system would provide the same level of protection from radiation and intense heat that a steel door provides. There is no expectation of success in making the substitution asserted by the Examiner. Because the skilled artisan would not expect the inflatable bladder of Pearman to protect the bomb shelter of Rudinger from the intense heat and radiation from a nuclear blast, there is no motivation for making the substitution. Withdrawal of the rejection is respectfully requested.

Claim 27 is rejected as being obvious over Rudinger, Trice, Daroga, Mayland, Hoshiko, and Staub, and further in view of Long et al. As the Examiner states, Long et al. teach how to seal a room in case of a biological attack. As stated above, Rudinger teaches a bomb shelter designed with steel or concrete covering the entrances to prevent exposure from the radiation and intense heat from a nuclear blast. Applicant submits that one of ordinary skill in the art would not expect plastic and duct tape to provide the same level of protection as the steel doors and concrete taught by Rudinger. Thus there is no motivation to combine the teachings. Additionally, even if one were to substitute the plastic and duct tape of Long et al. for the steel door of Rudinger, there is no expectation of success in achieving a bomb shelter capable of protecting occupants from the radiation and intense heat from a nuclear blast. Withdrawal of the rejection is respectfully withdrawn.

Claims 26 and 27 are rejected as being obvious over Long et al. in view of Michielson (US 3,575,167). Claims 26 and 31 are rejected as being obvious over Long et al. in view of Staub et al. The Examiner asserts that it would have been obvious to include the apparatus of Michielson or Staub et al. in a kit containing the plastic sheeting and duct tape of Long et al. because Long et al. do not address how the interior atmosphere of the sealed room should be replenished. Applicant traverses the rejection.

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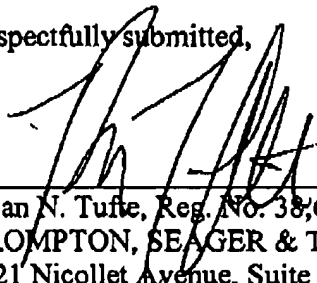
Long et al. specifically teach using a vacuum cleaner with a HEPA filter to provide clean filtered air and create positive pressure to the sealed room (page 52). Thus, there is no motivation for including the apparatus of Michielson or Staub et al. Withdrawal of the rejections is respectfully requested.

With respect to new claims 32-36, none of the cited references teach or suggest two or more different sealing devices. In view of the foregoing, all of pending claims 26-36 are believed to be in condition for allowance. Reexamination and reconsideration are respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 359-9348.

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Respectfully submitted,



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